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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,553	10/18/2004	Hideyasu Asakage	AOKI-0008	4653

23599 7590 01/18/2007  
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ARLINGTON, VA 22201

EXAMINER
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SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	01/18/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/511,553

**Applicant(s)**

ASAKAGE ET AL.

**Examiner**

Robert Sellers

**Art Unit**

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-10 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/18/2004 &amp; 12/16/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-7, drawn to a process for producing an epoxy compound with a chlorine content of less than 500 ppm.

Group II, claims 8-10, drawn to a composition containing an epoxy compound having a chlorine content of less than 500 ppm and a curing agent.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature. The special technical feature is the reaction at from about 95°C to about 150°C of an epoxy compound of general formula (I) in the presence of an alkali metal hydroxide.

3. Darbellay et al. Patent No. 4,668,807 (col. 1, lines 55-62) discloses the after-treatment of a polyglycidyl ether of acyclic, or mononuclear or polynuclear phenols (col. 2, lines 28-34 and 42-47) with an alkali metal hydroxide at a temperature of from 60°C to 130°C (col. 3, lines 15-16) to yield polyglycidyl ethers with chlorine contents of as little as 0.0011% by weight (col. 5, Example 3, lines 2-3, less than the claimed 500 ppm, or 0.05%).

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4. Based on the equivalent processes of production of Darbellay et al. and the claims, the polyglycidyl ether of Darbellay et al. inherently contains the claimed epoxy compound of general formula (II) wherein X of general formula (III) is present.

Accordingly, the special technical feature does not make a contribution over the prior art, thereby validating a holding of lack of unity.

5. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

a) The epoxy compounds of general formula (I) such as the diglycidyl ether of 1,4-di-tert-butyl-2,5-dihydroxybenzene of Example 1 on page 22, lines 16-17 of the specification.

b) The reaction with or without the tertiary alcohol of claim 5, wherein if its presence is elected, a particular species thereof is identified. Example 1 does not contain a tertiary alcohol.

c) Contingent upon the election of Group II, items a) and b) hereinabove and the curing agents such as the phenol aralkyl resin MEH-7800S utilized in Example 7 on page 33 of Table 7, footnote \*1.

Elections of single species ***within each of items a) and b), and c), if applicable***, are required to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is

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allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species (MPEP § 809.02(a)).

Claims 1-10 are generic.

6. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical feature for the reasons espoused with respect to the holding of lack of unity of invention set forth in previous paragraphs 3 and 4.

A telephone call was made to Anthony J. Zelano on January 15, 2007 to request an oral election to the above restriction and election of species requirements, but did not result in elections being made.

The reply to this requirement to be complete must include (i) an election of an invention and species to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention and species.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if one of the inventions is found to be unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. The prior art made of record and not relied upon is considered pertinent to the disclosure. Japanese Patent No. 59-43014 reports the treatment of an epoxy resin containing hydrolysable chlorine with NaOH or KOH at from 100°C to 130°C (Derwent abstract) to lower the hydrolysable chlorine content.

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Monday to Friday, 9:30 to 6:00

rs 1/15/2007



ROBERT E.L. SELLERS  
PRIMARY EXAMINER